Assessment of the potentiality of solar energy

841. SHRI S. ANBALAGAN: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether Union Government made any assessment of the potentiality of solar energy in solving the energy needs of the country in the long run;

(b) if so, the details thereof and the follow-up steps being taken/proposed to be taken thereon;

(c) whether any research is being made to harness the solar energy entirely without any wastage; and

(d) if so, the details thereof and the achievements made/proposed to be made thereon?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI VILAS MUTTEMWAR): (a) and (b) Efforts to assess availability of solar radiation in various parts of the country were initiated during early eighties. In this regard, India Meteorological Department (IMD) brought out two handbooks in 1980 and 1982. The annual average solar energy falling on one square meter of area is in the range of 4—7 kilowatt-hour. Presently, the Ministry has taken up a project with IMD, for updation of the solar radiation data. The project is under progress.

(c) and (d) The Ministry has been promoting development and utilization of solar energy in the country. It may be mentioned that every solar system/ device has certain losses of incident energy, and only a part of it can be converted into electricity or heat. As a result of the Ministry's efforts made so far, a number of devices and systems have been developed in the country. These include solar water heaters, solar cookers, solar lanterns, solar home and streetlights, pumps, small power packs and photovoltaic systems for battery charging applications, etc. The focus of research is on further improvement in the technology and cost reduction.

Monitoring the working of IREP

842. SHRI C. RAMACHANDRAIAH: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether Government have any mechanism to monitor the working of the Integrated Rural Energy Programme;

(b) if so, the details thereof;